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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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07/26/2001

Hechun Chen

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04/01/2005

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EXAMINER

NGUYEN, SON XUAN

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,076

Applicant(s)

CHEN ET AL.

Examiner

SON X. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Bortolotto et al. (U.S 6,738,825) hereinafter referred to as Bortolotto.

Regarding claim 1, Bortolotto discloses method for automatic end-to-end path provisioning for an optical network by a network management system **(See lines 50-52 of column 3)**, comprising:

obtaining path parameters for each network element of the network **(Control unit obtains provisioning data from network element; See lines 55-60 of column 3)**;
automatically performing discovery of paths including determining connection possibilities based upon the path parameters **(Control unit determines a path for data circuit based on provisioning data; See lines 61-63 of column 3)**; and

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automatically provisioning an end-to-end STS-n path **(Network element supports STS-n signals; See lines 57-60 of column 5)** based on the paths resulting from the discovery **(Control unit provisioning data circuit based on a matrix for cross-connect; See lines 63-67 of column 3)**.

Regarding claim 2, Bortolotto discloses the path parameters includes at least one parameter selected from the group consisting of bandwidth size, start network element, end network element, add facility, drop facility, link information, cross connection information, equipment information, facilities information, and scheduled load and availability information **(TCC 300 obtains all provisioning data for data circuit by creating and maintaining the data stitch matrix for data circuit; See lines 22-33 of column 8)**.

Regarding claim 3, Bortolotto discloses automatic discovery includes building a list of all possible connections for the end-to-end path **(Data stitch matrix corresponds to a list; See lines 33-35 of column 8)**.

Regarding claims 4 and 5, Bortolotto discloses the automatic provisioning includes selecting a least cost path from the discovered paths and setting the least-cost path as the working path and the least cost path is the shortest path based on the number of network element hops **(Data stitch matrix functions as routing table and it will be apparent to those skilled in the art that routing table will select the shortest path which is the least cost path; See lines 35-37 of column 8)**.

Regarding claim 6, Bortolotto discloses the automatic provisioning

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includes selecting a second least cost path from the discovered paths and setting the second least cost path as the protection path **(The next drop point corresponds to second least cost path or the protection path; See lines 1-10 of column 8).**

Regarding claim 7, Bortolotto discloses when the network has UPSR protection scheme, automatically provisioning facility fault protection (FFP) and cross connections **(Network element also supports BLSR and ULSR, so one skilled in the art would recognize the data circuit could also be a UPSR circuit; See lines 37-43 of column 7).**

Regarding claim 8, Bortolotto discloses a system for automatic end-to-end path provisioning for an optical network by a network management system, comprising: an input device for obtaining path parameters for each network element of the network **(Control unit ,or TCC300 in Fig. 3, obtains provisioning data from network element; See lines 55-60 of column 3);** and a processor for automatically performing discovery of paths including determine connection possibilities based upon the path parameters and for automatically provisioning an end-to-end STS-n path based on the paths resulting from the discovery **(Control unit ,or TCC300 in Fig. 3, determines a path for data circuit based on provisioning data; See lines 61-63 of column 3; Control unit provisioning data circuit based on a matrix for cross-connect; See lines 63-67 of column 3).**

Regarding claim 9, Bortolotto discloses the path parameters includes at least one parameter selected from the group consisting of bandwidth size, start network element, end network element, add facility, drop facility, link information, cross

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connection information, equipment information, facilities information, and scheduled load and availability information **(TCC 300 obtains all provisioning data for data circuit by creating and maintaining the data stitch matrix for data circuit; See lines 22-33 of column 8).**

Regarding claim 10, Bortolotto the processor automatic discovery includes building a list of all possible connections for the end-to-end path **(TCC 300 creates and maintain the data stitch matrix which corresponds to a list; See lines 33-35 of column 8).**

Regarding claims 11 and 12, Bortolotto discloses the processor performs Automatically discovery by selecting a least cost path from the discovered paths and setting the least-cost path as the working path and the least cost path is the shortest path based on the number of network element hops **(XC 600 in Fig. 6 routes the data stream based on data stitch matrix which functions as routing table and it will be apparent to those skilled in the art that rounting table will select the shortest path which is the least cost path; See lines 35-37 of column 8).**

Regarding claim 13, Bortolotto discloses the processor performs automatic provisioning by selecting a second least cost path from the discovered paths and setting the second least cost path as the protection path **(In case destination point becomes inoperable, XC 600 will routes data stream from the source point to the next drop point which corresponds to second least cost path or the protection path; See lines 1-10 of column 8).**

Regarding claim 14, Bortolotto discloses when the network has UPSR protection

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scheme, the processor being configured to automatically perform facility fault protection (FFP) provisioning and cross connections provisioning **(Network element also supports BLSR and ULSR, so one skilled in the art would recognize the data circuit could also be a UPSR circuit; See lines 37-43 of column 7).**

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Michael Chrabaszcz (U.S 6,263,387) System for automatically configuring a server after hot add of a device.

b) Aoyagi et al. (US-2002/0032761) Method of automatically recognizing network configuration including intelligent packet relay equipment, method of displaying network configuration chart, and system thereof.

c) Hada et al. (U.S 6,665,713) Topology information automatic configuration method and its topology information automatic configuration system.

d) Philippe Monot (U.S 5,708,778) Automatic configuration of protocol parameters in protocol layers for public area.

e) Scrandis et al (U.S 6,694,455) Communications network and method performing distributed processing of fault and alarm objects.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON X. NGUYEN whose telephone number is 571-272-6048. The examiner can normally be reached on 8 AM -5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/8/05
Son X. Nguyen

A handwritten signature in black ink, consisting of stylized, overlapping loops and a long horizontal stroke extending to the right.